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“PATENT”

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Walter Weissman et al. ) Before the Examiner  
U. S. Serial No. 09/818,210 ) Not assigned  
Filed: March 27, 2001 )  
Tuning Fuel Composition for Driving Cycle ) Group Art Unit 1764  
Conditions in Spark Ignition Engines )  
  
Commissioner for Patents  
Washington, DC 20231

Sir:

PRELIMINARY AMENDMENT

RECEIVED  
JAN 15 2002  
TC 1700  
RECEIVED  
DEC 18 2001  
TC 1700

Please amend the above-identified application as follows:

In the specification:

At page 6, paragraph 0020, line 9, please replace the paragraph with the following rewritten paragraph:

A1 ~~-Figure 3 are graphs of B burn rate and heat release rate that compares burn curves for isoctane and one fuel of the invention.~~

At page 16, paragraph 0054, line 6, please replace the paragraph with the following rewritten paragraph:

A2 ~~-Figure 7 shows the burn curves for DF-1 and LFG-2B at identical injection and spark advance timings of Spark Timing: 23 degrees BTDC, Injection Timing: 54 degrees BTDC. As can be seen, the burn curve for Fuel DF-1 shows two states of heat release. This heat release behavior is indicative of multipoint autoignition that occurs with the lower octane fuels. Even though the overall average burn rate for these fuels is comparable, both fuels being relatively high in burn rate, the data showing higher efficiency and lower emissions demonstrate the importance of maintaining low RON to get the benefits of autoignition.~~